the
GLOXINIAN
The Journal for Gesneriad Growers

Vol. 49, No. 4 Fourth Quarter 1999

Boea hemsleyana

American Gloxinia and Gesneriad Society, Inc.

A non-profit membership corporation chartered by the State of Missouri

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Gesneriad Hybridizers Association — *CrossWords,* 3 issues, $8. Send to Dan Harris, W-6349 Country Road "O", Appleton, WI 54914.

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Gesneriad Correspondence Club — U.S. $6.75; Canada $8.75; Foreign $14.00; Braille Newsletter $5.00 per year. Write to Lois & Ron Kruger, 207 Wycoff Way West, East Brunswick, NJ 08816-5644.

Gesneriad Research Foundation — 1873 Oak St., Sarasota, FL 34236-7114. Individual, $25; Family, $35; Club, $100. Visit our greenhouse and rainforest when in the area. Telephone (941) 365-2378. <hwiehler@aol.com>

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COVER

Boea hemsleyana – grown by Robert Hall awarded "Best in Show" at the 1999 Convention Flower Show (photo by Michael Riley)

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President's Message

Jon Dixon <president@aggs.org>
55 Tum Suden Way, Woodside, CA 94062

In this issue you will read about the 1999 AGGS Convention, this year one of the most successful and joyous events to occur in our forty-eight years of annual get-togethers. The Nashville crew hosted us with such good cheer and obvious personal enjoyment it was hard to realize the great amount of work and sacrifice made by the members of the Tennessee Gesneriad Society. Local Convention Chair Carol Ann Bonner and her crew took on the job with only a year of lead-time, the shortest in AGGS history. In her spare time, she also produced the beautiful 1999 AGGS tee shirt and pin as well as a new item, the AGGS insulated travel mug.

During the convention week while many of the attendees were busy enjoying the many convention events or sightseeing, the Board of Directors met to plan the Society's activities for the upcoming year. During our three sessions we reviewed every committee activity, planned our annual budget, set policies, and made changes to improve the society and ensure its future. We discussed new publications in the planning stages as well as new Slide Library Programs to be ready later this year. We initiated a French language message board on the AGGS web site. We approved an annual questionnaire and information packet that will be sent by AGGS to each chapter. And we initiated, through a special committee to be headed by Michael Riley, the planning of our Society's 50th anniversary, just two years away.

A number of committee chairmanship changes were made and are covered in Peter Shalit's Board Meeting Review on page 10. We are all indebted to our retiring chairmen for the excellent work that they did.

One of the positions that changed is perhaps the most significant occurrence in AGGS history. Ten years ago, Maryjane Evans took over the long-troubled and nearly defunct Seed Fund. Throughout the long history of AGGS, the Fund had never listed more than about 100 varieties of gesneriads. Changes and additions to the list were few, and those offered tended to be the same old common types. She took on every aspect of running the Fund—seed production, storage, order filling, packaging, shipping, and correspondence. For ten years the listing of seed has grown, quarter by quarter. Today, thanks to her efforts, we offer some 700 varieties of gesneriads. Many if not most of the varieties offered today were not in general cultivation in 1989. In July, she announced that she was stepping down in order to enjoy all of the aspects of growing gesneriads that had been held in abeyance for those many years. I am happy to announce that with the help of Maryjane we have found a superb candidate to handle this position. Laura Johnson, who has been an ardent seed grower and long-time correspondent with Maryjane, has agreed to be the new Seed Fund Chairman. I am confident that Laura will carry on the growth and excellence of the fund. But, for all of us, Maryjane will be forever—the "SeedLady".

Jon

The world of gesneriad enthusiasts has lost two notable members —

Lyndon Lyon was an ardent hybridizer and commercial grower of gesneriads since 1949. He passed away in May, but we are fortunate to have so many worthy hybrids by which to remind us of his efforts. He released over 800 *Saintpaulia* hybrids as well as many others in *Achimenes, Aeschynanthus, Columnea, Episcia, Gloxinia, Sinningia* and *Streptocarpus.*

Dr. Robert E. Lee was a teacher and researcher at the Bailey Hortorium at Cornell University in Ithica, NY. He passed away the end of July and will be long remembered for his research in genetics. He studied and hybridized many gesneriads and freely shared his findings and plants with members of AGGS for many decades.

Coming Events

October 16-17 — Illinois — Northern Illinois Gesneriad Society show and sale, Friendship Park Conservatory, 395 W. Algonquin Road, Des Plaines. Saturday and Sunday from 11:00 am to 3:00 pm. Free admission and parking. Contact Nancy Maybloom (847-882-4652) <hsmay@aol.com>.

October 23-24 — Missouri — Gateway West Gesneriad Society annual show and sale at Missouri Botanical Garden, 4344 Shaw Blvd., St. Louis. Saturday & Sunday 9:00 am to 5:00 pm. Contact Gary Dunlap <patspets@jcn1.com>

October 30-31 — Pennsylvania — AVS of Philadelphia annual show and sale at the Watertower Recreation Center, Ardleigh & Hartwell Streets, Chestnut Hill. Saturday 1:00 pm to 5:00 pm; Sunday 11:00 am to 4:00 pm. Contact Peggy DePhillippo (610-489-4744).

November 6-7 — New Jersey — Tristate African Violet Council annual AVSA show and plant sale "A Harvest of Violets" at the Frelinghuysen Arboretum, 53 East Hanover Avenue, Morristown. Saturday 1:30 pm to 5:00 pm; Sunday 10:00 am to 4:00 pm. Contact Stephen Burrell (914-896-8605).

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Seed Fund

Maryjane Evans <pollin8r@aol.com>
194 Morris Turnpike, Randolph, NJ 07869

As I compiled the seed list for this issue of TG, I realized that most of the seed on this list is field-collected seed or has been produced directly from field-collected plants. Adding field-collected seed to the Seed Fund list is always a special moment for me as I recall the beauty and vigor of the gesneriads in their habitat and the fun and adventure associated with collecting trips. And this list contains seed from TWO trips!

In the fall of 1996, Jeanne Katzenstein, Hans Wiehler and I traveled to Puerto Rico to study gesneriads. We were very fortunate in being able to see eight of the nine Puerto Rican gesneriads. The genus *Gesneria* is one of my favorites and it was wonderful to see them growing on limestone rocks, streamsides, roadsides, and moss-covered rocks. We saw *Gesneria pedunculosa* growing on roadsides with hundreds of yellow flowers swaying in the breeze. The variation in the flowers of *Gesneria cuneifolia* was remarkable, with flower color ranging from light orange to deep red. *Gesneria cuneifolia* flowers quickly from seed—order some today and you'll have flowering plants in the spring.

In April of this year the Gesneriad Research Foundation study group traveled to southern Brazil. With AGGS member Mauro Peixoto as our expert guide, we saw sinningias growing everywhere—on trees, roofs, limestone rocks, bare boulders, fields and forests, sand dunes at the beach, rock crevices, wet and dry roadsides, by waterfalls, and in sun and shade! We collected seed of many of these species and now you, too, can have your own little bit of Brazil by growing them from seed. Many of the sinningias in Mauro's greenhouse had been pollinated by a hummingbird. Seed from these plants is on the list below, designated as "Hummingbird Mix".

This is my last message as Seed Fund Chairperson. It has been my privilege and pleasure to serve for the past ten years and I thank the Society for this opportunity. As I turn over the Seed Fund responsibilities to Laura Johnson, I'd like to remind you again why it is so vital to support the Seed Fund. The importance of the Seed Fund can't be overemphasized.

1) It gives members the opportunity to grow new species and hybrids
2) More members growing a wider variety of gesneriads makes for a stronger and more vital Society
3) Members without chapter affiliation can obtain new plants
4) It's an inexpensive way to increase your gesneriad collection
5) It's a significant source of revenue for our Society, producing over 16% of our income
6) Setting seed ensures a species' existence in cultivation
7) Seedlings contributed to sales tables help support local chapters
8) Seedlings are a great way to introduce others to gesneriads
9) A large Seed Fund creates more overall interest in gesneriads
10) For many species, the Seed Fund is the only seed source in the world

Variations in *Gesneria cuneifolia* grown by Maryjane from seed collected during the study trip to Puerto Rico in 1996. (photo by Jeanne Katzenstein)

PLEASE NOTE: After November 15th, please send all seed orders and contributions to:

Laura Johnson, 15832 Winter Park Drive, Macomb, MI 48044-3881

We extend thanks to Marilyn Allen, Carol Ann Bonner, Norma Chenkin, Karyn Cichocki, Jackie Connelly, Ray Coyle, Keith Dabney, Arleen Dewell, Jon Dixon, Elizabeth Glazebrook, Susan Grose, Rebecca Gmucs, Laura Johnson, Jeanne Katzenstein, Martin Kunhardt, Alan LaVergne, Leong Tuck-Lock, Lars Loercher, Eileen Morrison, Ron Myhr, Ben Paternoster, Mauro Peixoto, Kathy Spissman, Bob and Dee Stewart, M J Tyler, Ruth Zavitz and the Smithsonian Institution for their generous contributions to the Fund.

Special thanks go to Clay Anderson, Marlene Beam and Sue Hodges for making multiple contributions and to the Gesneriad Research Foundation for contributing all the seed collected in Brazil.

Seed Packets — $1.50 each

Please

- Make checks payable to the AGGS Seed Fund in U.S. funds
- To pay by credit card, send your credit card number, expiration date, and signature, and indicate if the card is Mastercard or Visa ($6.00 minimum)
- Remember to enclose a self-addressed, stamped envelope
- List alternate choices
- Include your membership number (first number on your mailing label)

ADDITIONS:

Chirita tamiana USBRG98-080 (F,R,P)
• *Gesneria citrina* WEK96154 (F)
Gesneria cuneifolia WEK96151 (F,R)
Gesneria cuneifolia WEK96152
Gesneria cuneifolia WEK96155
Gesneria cuneifolia WEK96157
Gesneria cuneifolia WEK96158
Gesneria pedunculosa WEK96153 (S,T)
• *Gesneria reticulata* WEK96164 (F,R)
Gesneria viridiflora ssp. *sintenisii* WEK96162 (T)
Napeanthus primulifolius GRF9941 (H,P)
• *Napeanthus reitzii* GRF9932
Nematanthus fissus GRF99398 (L)
Nematanthus tessmannii GRF9904 (red calyx) (B)
Nematanthus tessmannii GRF9912 (red calyx)
Sinningia allogophylla GRF9922 (T)
Sinningia allogophylla GRF9929
Sinningia allogophylla GRF9968
Sinningia conspicua GRF9942 (fragrant selection) (F,L)
Sinningia curtiflora GRF9927 (T)
Sinningia elatior GRF9963 (M)
Sinningia mauroana GRF9964 (M)
Sinningia nivalis GRF9923 (L)
Sinningia reitzii GRF9914 (magenta) (M)
Sinningia sellovii GRF9929 (MT)
Sinningia warmingii GRF9921 (T)
• *Sinningia* 'Laura' × self (F,P)
Sinningia "Hummingbird Mix"
• *Streptocarpus* 'Demeter' × self (R)
• *Streptocarpus* 'Falling Stars' × self
• *Streptocarpus* 'Joker' × self
• *Streptocarpus* 'Kim' × self
Streptocarpus 'Mini Pink Fu' × self
• *Streptocarpus* 'Party Doll' × self
Trichantha ambigua 'El Yunque' WEK96163 (B)

• denotes LIMITED quantities

(B)	Suitable for hanging basket.	(MT)	Medium to tall.
(F)	Blooms readily in fluorescent light.	(P)	Petite or miniature; not more than 6 inches tall.
(H)	Requires humidity and warmth.	(R)	Rosette in form.
(L)	Low growing; not more than 12".	(T)	Tall plants; generally over 3 feet.
(M)	Medium height; 1 to 2 feet.		

DELETIONS:

Aeschynanthus cordifolius
Aeschynanthus tricolor
Besleria sp. USBRG95-143
Boea hemsleyana
Chirita sinensis latifolia (dwarf)
Chirita 'Hisako' × self
Codonanthe gracilis USBRG86-148
Codonanthe gracilis 'Kautsky'
Columnea argentea
Columnea zebranella
Dalbergaria cruenta
Dalbergaria sp. GRF 9797
Gesneria humilis
Koellikeria erinoides 'Polo Polo'
Lysionotus serratus
Napeanthus macrostoma
Petrocosmea formosa
Phinaea macrophylla
Sinningia cochlearis
Sinningia valsuganensis
Sinningia 'Sun Blaze'
Sinningia Al Wojcik Mix

Maryjane triumphant in her search for seed of *Nematanthus tessmannii* on the 1999 Brazil trip.

1999 Convention Board Meeting Review—Nashville, Tennessee

Peter Shalit <ps83@cornell.edu>
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AGGS members enjoyed a superlative 1999 Convention in Nashville, Tennessee. The AGGS Board, under the able leadership of Jon Dixon, performed its official duties during three Board meetings over the course of Convention. In addition, the annual General Membership Meeting was held after the luncheon on Friday, July 2.

The Board approved several changes in personnel among the Officers, Committee Chairs, and Directors.

Laura Johnson was approved as Newsletter Committee Chair, a job she has performed for the past several months. Gerard Vriens resigned as Photography Chair and will be replaced in that position by Julie Mavity-Hudson. Jon Dixon has stepped down as Chapters and Affiliates Chair and will be replaced by Arleen Dewell. Helen Freidberg will be giving up her Historian position, and Suzie Larouche will take over.

Maryjane Evans is retiring as Seed Fund Chair, a position she has held for ten years. Maryjane has transformed the Seed Fund from a small list of common varieties to a huge list of nearly 700 varieties of gesneriad seed, including many unusual and unique species and varieties that can be found nowhere else. This is an invaluable service to our membership. The Seed Fund continues to break sales records and is the second largest source of operating funds for the Society. Maryjane received a standing ovation at the General Membership meeting for her superlative work on the Seed Fund.

Laura Johnson will be replacing Maryjane at the helm of the Seed Fund. As a result, Laura will be stepping down as Newsletters Chair. Carol Ann Bonner will be taking over that position.

The following AGGS Officers were elected by the Board for a second term, from 1999 to 2001: Jon Dixon, President; Susan Grose, First Vice President; and Peter Shalit, Recording Secretary.

At the Membership Meeting, the slate of Directors presented by the Nominating Committee was elected for a three-year term: John Boggan, Helen Bortvedt, Robert Connelly, Arleen Dewell, JoAnne Martinez, Bob Nicholson, and Pat Richards. There were no nominations from the floor. Next year's Nominating Committee will consist of Bob Connelly (chair), Paul Kroll, and Marlene Beam.

Helen Freidberg, AGGS Bylaws Chair, has proposed a change in the Bylaws to bring them into line with current practice, regarding reporting by chapters to AGGS of their officers and bylaws. The Board approved this Amendment which will be published in the 2Q00 issue of THE GLOXINIAN and then voted on by the AGGS membership at the Year 2000 AGGS Convention in Tampa.

Jeanne Katzenstein reports that THE GLOXINIAN will continue to be 56 pages in length, as long as she receives enough material. Each issue will have at least four color photos; additional photos depend on sponsorships. Membership fees do not cover the costs of printing and mailing THE

GLOXINIAN which are subsidized by other revenues. An increase in membership would help our bottom line.

Dave and M.J. Tyler, Membership Secretariat, report a steady increase in membership. More are taking advantage of the three-year membership rate, and credit card use is increasing significantly. Dale Martens, Advertising Manager, has had success in attracting new advertisers. Please patronize our advertisers so that they continue to advertise in THE GLOXINIAN.

Judy Becker, Registrar, reports that the *Streptocarpus* Register should be ready by the time you read this. The next register published will be *Kohleria*. Others are in the planning stages.

Marlene Beam, Library and Education Chair, reports that we have eight slide programs in circulation. The Chirita program has been very popular. Two new programs on Streptocarpus are being prepared in coordination with the release of the Streptocarpus Register and the special Streptocarpus issues of THE GLOXINIAN.

Ben Paternoster, Shows and Judging Chair, is finishing the preparation of a new, revised and updated edition of the Judges Manual. It should be ready later this year. Another successful judging school was held at the Nashville Convention, and several regional judging schools are planned over the next year.

Our Treasury is doing well. Helen Bortvedt, Treasurer, helped the Board arrive at a balanced budget for the next year, once again without a dues increase. Income from the interest on the Frances Batcheller Endowment Fund helps support the operating expenses of the Society. The Fund continues to grow, and over $6000 was contributed at this year's auctions.

Note: Reports on the Awards of Appreciation and the Frances Batcheller Endowment Fund will appear in the First Quarter 2000 issue of THE GLOXINIAN.

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A Convention Under the Magnolias

Suzie Larouche <suzielaro@sympatico.ca>
20 Carlton, suite 1521, Toronto ONT M5B 2H5 Canada

Many people undoubtedly wonder how much enjoyment can be expected in Nashville in meltingly hot July. A great, big, ole Southern lot, as this year's convention goers can tell all who want to listen. But then it was mostly a matter of finding gracious hostesses, a hotel more luxurious than we can remember having for any other convention at such a bargain rate, and AGGS members determined to have a good time. The ride from the airport to the hotel was a refreshingly short and inexpensive one along streets where magnolias are as commonplace as maples are up North, a fitting beginning to several days of fun in the land of country music. At the Loews Vanderbilt Plaza Hotel situated across the street from Vanderbilt University, Carol Ann Bonner, Holly Waldrop and Julie Mavity-Hudson, assisted by the precious few other members of the Tennessee Gesneriad Society, managed to be everywhere—or so they appeared to us—and to make us feel an embracing welcome. They also delighted our ears with the many extra vowels adorning their local speech as so many notes grace baroque music.

The group was a large one, 175 attendees, and they came from everywhere: the other end of the world was represented by two who had come from Australia and two from Japan, 21 arrived from Canada (the Toronto Chapter was so well represented that it could have held its meeting right there), and 150 attendees came from 31 states in the U.S.

Among those who arrived early were the board members who, as before every convention, held their first meeting on Tuesday afternoon while others braved the searing heat and toured the city. Serious business indeed for both groups, one envying the other, and not vice versa. Then, on Wednesday, an imposing number of conventioneers participated in judging school made even more attractive this time by a workshop on photography. Too few people could enroll in the workshop, where Julie Mavity-Hudson (recently appointed AGGS Chairman of Photography) guided participants around the issues to consider when judging photographic entries in a show.

Nobody would believe that our convention was really about to begin if the Gesneriad Hybridizers Association, a.k.a. GHA, did not have its customary meeting on Wednesday night—quite a meeting at that—chaired by president Dale Martens. The evening's featured speaker was Jerry Trowbridge from Florida who made us all eager to get the beautiful (and very large) *Columnea* hybrids he introduced in a recent issue of TG. Dale, being a generous person, felt we were entitled to a second speaker. Fully recovered Darrell Trout then gave us a glimpse of one of his recently published garden books. But of course that was not the end of it.

Since we had been teased with the promise of door prizes in the form of highly coveted new hybrid seeds and cuttings, the drawing started, and we discovered afterwards that a lot of the good things had been kept for the end. What sorts of good things? Hybridizers such as Dale Martens and John Boggan showed off their latest efforts or stated their hopes for the near future. But best of all, that gentleman from Japan, Toshijiro Okuto (who recently contributed an incredible number of streptocarpus pictures to the AGGS web site), presented gorgeous pictures of his new *Streptocarpus* and

Registrar Holly Waldrop

Hospitality Chairs
Diane Fischer & Carra O'Daniel

Flower Show Chair Molly Schneider
with the Tennessee Chapter Exhibit

Speakers' Chair Jonathan Ertelt
with Sam and Bonnie Ertelt

Special Events Chair (and
new AGGS Photography
Chair) Julie Mavity-Hudson

AGGS President Jon Dixon, Speaker Leslie
Brothers, Local Convention Chair Carol Ann Bonner

Chirita hybrids, as well as pictures of some *Chirita* species he uses in his work. In his amazingly correct English (which he taught himself listening to the radio and watching television) and with slides that would make even a professional photographer proud, he guided us through the latest chapters of his hybridizing efforts. Then he whetted our appetites by mentioning that he had donated some of the material he had shown for the convention auctions.

As wonderful as all auction donations were, this one is worth mentioning. There were more than fifty cuttings of new hybrid streps and chiritas and species chiritas that were not available for culture here on this side of the world. All these goodies were neatly tucked in individual plastic bags, each bearing its identification label AND a colour photograph of what to expect. (A great idea that future donors would do well to emulate if auction results are to be believed.) The few articles that were presented to the membership at the live auctions commanded prices that had our Japanese friend grinning from ear to ear. He could barely believe that people would part with more than a hundred dollars for a leaf cutting of a variegated streptocarpus—actually, two did. Meanwhile, in the silent auction room, people were almost elbowing each other out of the way to put down their bids. So much so that two of the tables holding the material had to be moved out of the room into the hallway to facilitate traffic. One only has to look at the financial results of the auctions to realize how much we need to thank Mr. Okuto for his generosity which not only produced good money-makers for the Frances Batcheller Endowment Fund but also introduced a significant number of hybrids and species previously unknown on this continent.

It is part of our tradition to take a tour of the local horticultural highlights, and we were well served with Holtkamp Greenhouses, home of the Optimara and Rhapsodie African violets, where we saw millions of them in all stages of their development. It was also interesting to get a firsthand peek at how a single, family-owned operation can feed so many plants to so many AV lovers. Since there were too many of us for a single guide, we were divided into groups, each led around the huge facilities. Our group included the youngest AGGS Convention addict, Nolan Turley, who first attended *in utero* four years ago and seems to be aiming at never missing one. Our guide made his day when he took him on a "train ride" on a greenhouse conveyor.

Conventioneers touring Holtkamp Greenhouses

After we had seen acre upon acre of hybrid saintpaulias, we were taken to Opryland Hotel. Nobody who goes to Nashville should miss this extravaganza that combines a larger-than-life hotel and a better-than-life series of gardens, or "interiorscapes"—better because they are contained under a huge dome and air-conditioned. Paradise, pure and simple, marred only by the dearth of gesneriads among the impressive plantings proudly shown off by our guides. Lunch was served at a patio restaurant, of course under the dome, where we could enjoy the sunny day without suffering the heat. Bliss. Afterwards, we had time to ourselves to shop the numerous boutiques of the hotel's six huge wings, or simply to slowly wend our way back to the buses through the gardens admiring in more detail what we had only glimpsed earlier.

Back to our hotel after several hours away, Master Nolan, asleep in his mother's arms by then, was taken to his bed and show entrants went into a frenzy of last-minute grooming before they registered their "babies". To some, the process was an intimidating one, although all but one plant successfully passed the inspection of the flashlight brigade: experienced bug detectors John Boggan and Peter Shalit, remembering how poorly lit the room had been in Chicago last year, had come armed with small flashlights in order to dispell all insect-concealing shadows. They were quite a hit, all the more noticed as one third of registered attendees (57 of them to be exact) processed 167 entries, an increase over recent years in the number of entries and exhibitors.

While this was going on downstairs, excitement was building upstairs where Nashville Chapter member Richard Holder was leading his troops in last-minute preparations at the sales room. Helped by several conventioneers who had volunteered on their registration form to do so, he saw that all the tables were supplied before he finally gave the signal to open the doors to those who held early sales entrance tickets. As usual during this fevered period when a long line forms at the door, spirits were high and people greeted friends they had not seen since last (or next-to-last) convention, while hoping that there would be some goodies left on the tables when their turn came to enter the room. Not to worry, everything had been seen to. One would be hard-pressed to remember a convention where more gesneriads and a greater variety of them were ever offered for sale. And thanks to AGGS' newly acquired capacity to take major credit cards, the checkout workers were ready to take payment for whatever buying sprees occurred (and they did). The depleted stocks would also be replenished regularly until sales closed for good on Saturday.

Late to bed and early to rise for show judging teams, equally late to bed and only slightly later to rise for others, Friday morning brought about the first lecture on the program, a fascinating recount by Sue Hodges of the life and times of a gesneriad grower in Australia. Afterwards, unlike other years, the show was open to viewers before lunch. Our first peek revealed outstanding chiritas, among them the very small, stolon-producing *C. gemella* from Vietnam grown to Maryjane Evans' usual standards of perfection, next to her two new petrocosmeas, *P. begoniifolia* and *P.* 'Momo', the only existing hybrid of the genus. Needless to say, cuttings of all these were later offered at auctions and fetched healthy bids. There were actually more petrocosmeas in the show than had been seen in a long time. At the end of the same table sat a striking *Chirita* 'Sweet Dreams' grown to nightmarish proportions.

Suzie Larouche &
Carolyn Conlin-Lane

Frances Batcheller & Toshijiro Okuto

AGGS Convention Chair
Helen Freidberg

Plant Sales Chair
Richard Holder

New Seed Fund Chair
Laura Johnson

Master Nolan Turley
& Maryjane Evans

Peter Shalit, Bob Clark, and Patrick Worley
relaxing at the Saturday night social

The design tables featured a number of interesting entries, one of them a dramatic interpretation of "Walkin' after Midnight". Next to the only commercial display on the premises by Lyndon Lyon Greenhouses, where each individual plant was blue-ribbon quality, an educational display by Ron Myhr on decorative bracts and calyces drew our attention. We had to stop at Wallace Wells' display on tubers complete with a plaster molding of a particularly interesting one, admire the Tennessee Gesneriad Society's delightful record of its history, back to a tour of the plants admiring an exquisite bonsai *Chirita linearifolia* in passing and a perfect *Episcia* 'Cleopatra' grown in open air, then *Sinningia* 'White Sprite' with so many flowers it looked almost like a white cushion, on to Robert Hall's *Boea hemsleyana*, which justifiably won Best in Show, and too many others to list.

Time to go to lunch and the annual membership meeting where President Jon Dixon announced the resignation of Maryjane Evans as Seed Fund Chair. Maryjane was given a standing ovation by the membership, and every member reading this should also stand and clap for the tremendous work accomplished by this exceptional woman in her ten-year tenure. From a ragtag fund that sporadically provided few varieties of commonly grown species and hybrids, she single-handedly created an exceptionally stocked fund where she has personally contributed most of the seed and which now features the extensive list published in the last issue of TG. Thankfully for us all, Maryjane has handpicked her successor, Laura Johnson, and the transition should take place gradually and smoothly by year-end.

One such announcement was quite enough for the day and everyone eagerly moved to the lecture hall to hear Patrick Worley talk about his hybrids, spotted or not, with his usual humour. During the course of his lecture, Patrick revealed to us his scientific explanation of why gesneriads grow in small pots and yet bloom a lot: the tightness around the roots, he said, crowds the flowers up and out. The scientific community may greet this explanation with even less enthusiasm than it did Galileo's view of the solar system at one time....

At the Awards Banquet that evening, it was interesting to note that as Colleen Turley called the winners to claim their awards, Sweepstakes and Sweepstakes runner-up in Horticulture as well as Sweepstakes in Design were all taken by first-time conventioneers—Robert Hall and Carolyn Conlin-Lane, both from Toronto, and Karen Cichocki from New Jersey, respectively. Congratulations to them and to all exhibitors, who went to the trouble of carrying their entries from all over so that we could enjoy them.

On to the live auction where fierce bidding fetched top prices for lots of growing material including a collection of plants donated by Dale Martens. There was also a rare plant (one of only three existing specimens in cultivation) from Vietnam that came by way of Australia and Sue Hodges. Also, the variegated streptocarpus leaves were eagerly fought over by bidders.

Saturday morning brought the judging critique followed by two more lectures. Jonathan Ertelt would guide us through building and using containers for growing gesneriads, giving practical pointers such as only a man with little space to grow would think of. In turn, Leslie Brothers, who is in charge of the plants at the Smithsonian Institution greenhouses in Maryland, shared with us the travails of growing beautiful gesneriads, and numerous others, mostly to have them eventually flattened and dried to herbarium format.

Then came the final frenzy in the silent auction room. No price was too high for the coveted cuttings. There was still another round of live auction to test our generosity after lunch. Bids flew back and forth at a steady pace, until nothing was left to auction off and we could proceed to the last viewing of the show and check of the sales room, just to make sure nothing interesting that could be crammed into our luggage had been overlooked.

All these efforts gave way to the hottest tour in a long time, a visit to Cheekwood Botanical Gardens. Hot it certainly was. Some were wise and took shelter in the air-conditioned gift shop. The more adventurous among us embarked on a guided trek of the gardens. The coolest spots were the greenhouses where we found some gesneriads. Our guide was thrilled that we could identify those that were mislabeled and more thrilled when someone pointed out that he could now relate a Patrick Worley hybrid to the hybridizer who was there in the flesh.

The blessed coolness of the buses was so greatly appreciated that nobody protested when our drivers took us on an unexpected 45-minute detour through magnificent country lanes where we could admire deer grazing nearby. The drivers finally found their way to Traveller's Rest where food and refreshments were awaiting us. Famished and thirsty, we went through a surprisingly fast serving line. The servers warned everyone about the hot sauce, but some found it even hotter than that. No problem, the Jump Gypsies were there to cool us off with their music and their stomping. Julie Mavity-Hudson was the highlight of the show with her two-whistle and singing solo. For those of you who wonder how she can do it, no, she does not breathe through her ears, and yes, she is very good. There was also some country dancing, a fitting end to a convention that will be remembered among the great ones.

Back at the hotel after the excitement of the last day and evening of convention, all that remained to do was say good-bye; then perhaps take some time on Sunday for a final look at the magnolias around the hotel and on the campus.

Thank you Carol Ann, Molly, Julie, Holly, Jonathan, Richard and all the others. You proved that a very small chapter can host a very big convention exceptionally well. See y'all next year in Tampa!

Julie Mavity-Hudson two-whistled and conventioneers danced to the sounds of the Jump Gypsies

Special Contributions

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Jeanne Katzenstein in honor of former Photography Chair Jerry Vriens
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A New Rosulate Chirita from Vietnam

B. L. Burtt, Royal Botanic Garden Edinburgh
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An attractive new rosulate species of *Chirita* has recently been welcomed into cultivation. It was collected on Tam Dao, a mountain NW of Hanoi, the capital of Vietnam, by the Soviet-Vietnamese Expedition of 1986. Plants flowered in the Botanic Garden at St. Petersburg in 1991 and have now found their way, via the gardens at Liberec (Czech Republic), Vienna University and R.B.G. Edinburgh into more general cultivation.

At first this plant was identified as *Chirita eberhardtii*, but it is now recognized that it does not belong to that species, which was described from the neighbourhood of Tourane (now Da Nang) in the old Kingdom of Annam and some 600-700 km south of Tam Dao. The new species, which is here given the name ***Chirita tamiana,*** differs from *C. eberhardtii* in having leaves with entire, not toothed margins, in the flowers being clustered (subumbellate) in the inflorescence, whereas in *C. eberhardtii* they are spaced up the elongate inflorescence-axis, in the calyx being twice as long (15mm against 6mm) and the corolla having a wider tube that is abruptly narrowed at the base (whereas that of *C. eberhardtii* is gradually narrowed from mouth to base). These are the diagnostic characters that are most easily seen, and are used below in the obligatory Latin diagnosis that validates the new name. There are other differences, but the true *C. eberhardtii* has not yet been introduced into cultivation, and is, in fact, known only from the type specimen and one other in the Paris herbarium.

A conspicuous and attractive feature of the white flowers of *C. tamiana* is the pair of tapering purple-blue lines that stretch from either side of the median lobe of the corolla down into the throat. The habit of the plant is a good *Saintpaulia*-like rosette of petiolate leaves: the leaf-blade is dark green and, like some species of *Saintpaulia*, it looks at first sight as though it is glabrous (entirely without hairs); but closer examination, especially if it is looked at edge-on, shows that there are numerous short stiffly erect pointed colourless hairs; these are scarcely visible when looking directly from above. *Chirita tamiana* sets seed freely in cultivation and should become immensely popular among gesneriad-enthusiasts.

Chirita tamiana B.L. Burtt, ***species nova*** *C. eberhardtii* Pellegrin affinis sed differt folius suborbicularibus (nec ellipticis) in pagina superiore pilis brevibus erectis indutis aliisque paucis longioribus intermixtis (nec "pilis appressis"), marginibus subintegris (nec conspicue crenato-dentatis), inflorescentia internodiis brevissimis et ergo floribus subumbellatis (nec floribus per paribus pseudoracemosim dispositis, internodiis distinctis), bracteis primariis 2 cm longis acuminatis (nec 6 mm longis tantum, persistentibus), calycis segmentis duplo longioribus (15mm, nec 6mm) corollae tubo latiore basi abrupte angustato (nec infra gradatim angustato).

Type: cultivated in Royal Botanic Garden Edinburgh under no.199811743 (E). Origin, N. Vietnam, Prov. Vinh Phu, Tam Dao (NW of Hanoi) coll. Soviet-Vietnamese Expedition 1986, No. 114.

Chirita tamiana grown by Maryjane Evans
(Photo by John Evans)

Chirita tamiana

John Boggan <boggan.john@nmnh.si.edu>
Dept. of Botany, NHB 166, Smithsonian Institution
Washington, DC 20670

In May 1998, one of my colleagues at the Smithsonian, Anna Weitzman, traveled to Scotland to work at the Royal Botanic Gardens in Edinburgh. From my correspondence with B.L. Burtt, I knew that the gardens were growing several Vietnamese species of *Chirita*, so I got an import permit and arranged with Mr. Burtt to send some of them back with her. There are about 20 species of *Chirita* in Vietnam, but except for one or two weedy annual species of section *Microchirita*, the species are very poorly known. My own interest is in the rosulate species of section *Gibbosaccus*, which are restricted to southern China and northern Vietnam, and none of the Vietnamese species of this section were in cultivation in North America. Whatever the plants at Edinburgh were, I knew they would be new and very interesting.

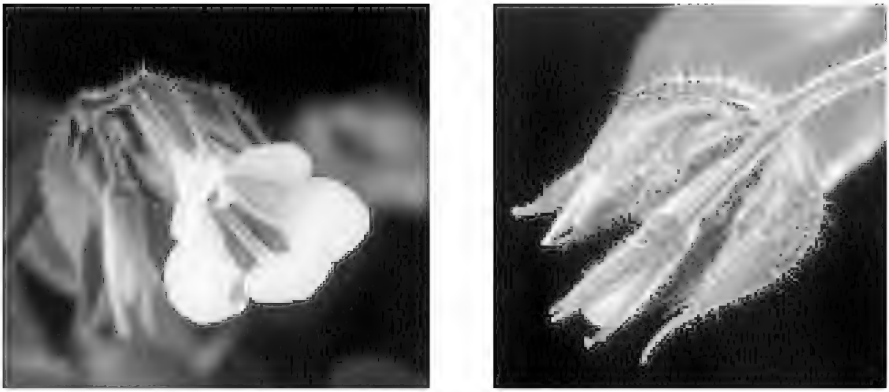
When Anna returned, she brought with her a packet of seeds labeled *Chirita eberhardtii* along with the bad news that leaf cuttings of several more species had been confiscated at the St. Louis, Missouri airport. Anna was

carrying the Smithsonian's standard import permit for bringing live plants into the country through any of several listed "ports of entry", but as it turns out, St. Louis is not one of the listed ports of entry, and they do not have a USDA inspector at customs. All plant imports must be inspected and declared free of pests and diseases, so the plants had to be sent to a USDA office in St. Louis for inspection before they could be released to us.

I immediately planted the seeds and then spent the next several days trying to track down the USDA office and the particular person who was in possession of the leaf cuttings, and arranging for Federal Express to pick up the plants and send them to the Smithsonian. I had no idea how the cuttings had been packed, how durable they were, or how they had been treated by the USDA inspectors. By the time the package arrived, I was afraid I would open it and find black mush. To my great joy, upon opening the package I found three plastic bags stuffed with damp sphagnum moss and fresh, firm, green leaves of three different species of *Chirita*, all apparently rosulate species of section *Gibbosaccus*. I will write about these others in a future article, hopefully having seen them finally bloom! In the meantime, I would like to describe the new plant that has been introduced and widely grown under the incorrect name *Chirita eberhardtii* (Smithsonian accession number USBRG 98-080).

In early 1999, I heard from Mr. Burtt that the plants we were growing as *Chirita eberhardtii* were in fact a new and still-undescribed species. By that time, the Smithsonian's plants had bloomed and I had distributed seeds and seedlings to a number of people. The plant was already so widely grown, so popular, and in such high demand, that we agreed that a new name should be published as soon as possible. This new name was first announced at the 1999 Convention in Nashville, Tennessee, and has also been announced on the Gesneriphiles Internet list. All plants labeled as *C. eberhardtii* should be relabeled as *Chirita tamiana*, the name chosen for this new species (see accompanying article by B.L. Burtt). The true *C. eberhardtii* is not in cultivation.

Chirita tamiana has proven to be a charming little plant, and has been an instant hit with gesneriad growers everywhere. Comments from those who have seen the plant are that it looks like a miniature *Saintpaulia* with the flowers of a *Streptocarpus*. The plant forms a loose rosette to about 4" (10 cm) across with a short stem, making it a true miniature. The leaves are produced in an alternate arrangement, with petioles to about 1" (2.5 cm) long, the blades slightly peltate, heart-shaped to nearly round, to 1-1/2" (4 cm) long (not much larger than a U.S. quarter), medium to dark green above and pale green beneath, in appearance and texture very much like a diminutive *Saintpaulia.* The flowers are produced 4-6 per axil on elongate peduncles to 3" (7.5 cm) long that hold the flowers well above the foliage, with leaflike bracts that loosely enclose the developing buds, spreading apart as the developing flowers push out and withering as the flowers open. The flowers are about 1-1/2" (4 cm) long from the base to the tip of the jutting lower lobe, 3/4" (2 cm) across the limb, the tube and lobes pure white with two purple lines in the throat extending partway out onto the limb. The flowers self-pollinate very easily, often spontaneously, producing a seed capsule about 1" (2.5 cm) long, slightly curved upwards, which dehisces along both the top and bottom sutures (unlike that of most rosulate chiritas, which usually opens primarily



Close-up of flower and inflorescence of *Chirita tamiana*

along the top suture). *Chirita eberhardtii* was placed in section *Gibbosaccus* by D. Wood in his 1974 revision of the genus, but *C. eberhardtii*, its relative *C. tamiana*, and perhaps one or two other related species are unlike any other species in section *Gibbosaccus*. Their proper placement awaits further study.

The above measurements come from the plants grown at the Smithsonian Institution, none of which has grown more than about four inches (20 cm) in diameter. Plants grown by Maryjane Evans, one of which won a blue ribbon in the New Species in Flower class at the 1999 Convention, have grown to nearly twice this size, with up to 9 flowers per peduncle. The size of the plant apparently depends on culture, but we haven't determined what cultural conditions resulted in so great a difference in size. I would guess that Maryjane's plants grew to the maximum size for this species, but since it's so new, we can't be entirely certain just how big it may ultimately grow. Another curiosity of Maryjane's plants is that the purple stripes in the throat are paler or even absent on flowers produced in warmer temperatures, something I have not observed on the Smithsonian plants.

Chirita tamiana will grow from seed to bloom in less than 6 months. Because the plant bloomed from seed so quickly and set seed so freely, I feared that it might be an annual, but the plants rebloomed after a short semidormant period and I have heard from other growers that the plants are perennial, producing new leaves and flowers on a gradually elongating stem. When the stem gets too long, the plant can be treated like a long-necked saintpaulia: pot it deeper, or cut the top off and re-root it. *Chirita tamiana* is easily propagated from leaf cuttings as well. This is not a fussy plant, growing well under a variety of growing conditions. I have grown the plants both with and without extra lime in the soil, and they have done quite well either way, provided they are given a well-drained soil. They are tolerant of moderately dry conditions and drying out slightly does not seem to affect flowering. The plants have a small root system, and a 3" pot is plenty large enough. Several plants blooming together in a larger pot would produce a much showier display.

Chirita tamiana is easy to grow, easy to propagate, can be grown as a miniature, is quick to bloom, and produces abundant dainty flowers. What more could a gesneriad grower ask for?

1999 Convention Flower Show Awards

Colleen Turley <awards@aggs.org>
6118 Windsor Drive, Fredericksburg, VA 22407-5058

It is my pleasure to report the following award winners from the 1999 Convention Flower Show held in Nashville. There were many exhibitors who were recognized for their accomplishments. Top honors went to two members from Canada, proving that travel with show-stopping plants is not impossible! My thanks to all the generous members and chapters who made these awards possible. I appreciate the opportunity of being able to award for every class, section, and special award. I am pleased to say that I was able to use a portion of each award from every generous donor. However, the balance of some gifts wasn't used and that money shall be donated towards color photography in The Gloxinian. I truly appreciate this luxury I enjoyed this year. Thank you for your support.

Now it's time to start preparing for Tampa. Plan to grow some plants to show—I am already accepting award donations for next year's Flower Show. See you in Florida!

Special Awards

SWEEPSTAKES IN HORTICULTURE – to Robert Hall for 4 blue ribbons (388 points), a cash award from the New England Chapter

RUNNER-UP TO SWEEPSTAKES IN HORTICULTURE – to Carolyn Conlin-Lane for 4 blue ribbons (377 points) a cash award from Gateway West Gesneriad Society

SWEEPSTAKES IN ARTISTIC – to Karyn Cichocki for 3 blue ribbons, a cash award from Sue and John Hodges and from the Toronto Gesneriad Society

BEST IN SHOW – to Robert Hall for *Boea hemsleyana*, a donation for a plaque with a picture of the winning plant from the Long Island Chapter in memory of Frank Freiheit

SECOND BEST IN SHOW – to Mary Bozoian for *Gloxinia* 'Chic', a cash award from Helen Freidberg in memory of Anne Crowley

BEST ARTISTIC – to Lee Linett for her arrangement "The Nashville Opera Company Season", a cash award from Arleen Dewell in memory of Jeanne Meyers

BEST IN THE ARTS – to John Evans for his color print of *Columnea filipendula*, a cash award from Peter Shalit

BEST SPECIES – to Julie Mavity-Hudson for *Pearcea hypocyrtiflora*, a cash award from the Suncoast Gesneriad Society

BEST RECENTLY REGISTERED (1995-1999) – to Mary Bozoian for *Chirita* 'Hotei', a cash award from the Gesneriad Hybridizers Association

BEST TUBEROUS – to Dale Martens for Sinningia 'White Sprite', a cash award from Hans and Everdina Inpijn

BEST RHIZOMATOUS – to Mary Bozoian for *Gloxinia* 'Chic', a cash award from the Tampa Bay Gesneriad Society

BEST FIBROUS – to Robert Hall for *Boea hemsleyana*, a cash award from Lauray of Salisbury

BEST GROWN FOR FOLIAGE – to Robert Hall for *Episcia* 'Cleopatra', a cash award from Arleen Dewell in memory of Linda Holt

BEST MINIATURE GESNERIAD – to Dale Martens for *Sinningia* 'White Sprite', a cash award from Maryjane Evans

BEST NEW INTRODUCTION – to Mary Bozoian for *Chirita* 'Hotei', a cash award from Jeanne Katzenstein

BEST LESSER-KNOWN GESNERIAD – to Vivian Scheans for *Sinningia douglasii* (exhibited as *micans*), a cash award from the Northern Illinois Gesneriad Society

BEST COLLECTION – to Jill Fischer for her *Episcia* collection, a cash award from the National Capital Area Chapter

Horticulture Sweepstakes winner
Robert Hall with *Boea hemsleyana*

Artistic Sweepstakes winner
Karyn Cichocki

Columnea filipendula color print
exhibited by John Evans
awarded Best in the Arts

"The Nashville Opera Company
Season" arrangement *Aida* exhibited
by Lee Linett awarded Best Artistic

Gloxinia 'Chic' exhibited by Mary
Bozoian awarded 2nd Best in Show

BEST GESNERIAD GROWN BY A NOVICE – to Kathy Spissman for *Chirita* 'Kazu', a gift certificate from Violet Ventures

BEST MICRO-MINIATURE SINNINGIA – to Dale Martens for *Sinningia* 'White Sprite', a cash award from the Frelinghuysen Arboretum Gesneriad Society in memory of Susan Schlieder

BEST STREPTOCARPUS – to R. David Harley for *Streptocarpus trabeculatus,* a cash award from Marlene Beam in memory of Dale Munger

BEST ARRANGEMENT OF FRESH CUT MATERIAL – to Lee Linett for "The Nashville Opera Company Season", a cash award from the Grow and Study Gesneriad Club

BEST ARRANGEMENT USING GROWING GESNERIADS – to Karyn Cichocki for "Blackberry Winter", a cash award from Laura Shannon

BEST CONTAINER GARDEN – to Miriam Greene for her terrarium, a cash award from the Tampa Bay Gesneriad Society

BEST IN PHOTOGRAPHY – to John Evans for his color transparency of *Dalbergaria ornata*, a cash award from Daphne Yaremko

BEST CRAFT – to Karyn Cichocki for her pressed flower picture, a cash award from Peter Shalit

BEST COMMERCIAL EXHIBIT – to Lyndon Lyon Greenhouses, a cash award from Michael Riley in memory of Lyndon Lyon

BEST EDUCATIONAL EXHIBIT – to Ron Myhr for "Decorative Bracts and Calyces", a cash award from Marlene Beam in memory of Dale Denham

Division I – HORTICULTURE

SECTION A - Tuberous Gesneriads in Flower

Class 2 – to Marlene Beam for *Sinningia* 'Evelyn Ruth', a cash award from the American Gesneriad Society of San Francisco

Class 3a – to Marlene Beam for *Sinningia* 'Macro Red', a cash award from the Delta Gesneriad & African Violet Society

Class 3b – to Dale Martens for *Sinningia* 'Amizade', a cash award from Fay Wagman

SECTION B – Rhizomatous Gesneriads in Flower

Class 5 – to Pat Dunlap for *Achimenes* 'Purple King', a cash award from the Gloxinia Gesneriad Growers in memory of Emma Lahr

Class 6 – to Mary Bozoian for *Gloxinia* 'Chic', a cash award from Bonita Hutcheson in memory of Dale Munger

Class 7 – to Gary Dunlap for *Kohleria* 'Red Ryder', a cash award from Isla Montgomery

Class 8 – to Robert Hall for *Phinaea multiflora* 'Tracery', a gift certificate from Pat's Pets

SECTION C – Fibrous-Rooted Gesneriads in Flower

Class 10 – to Janis Mink for *Chirita sinensis* 'Hisako', a cash award from the Toronto Gesneriad Society

Class 13 – to Robert Hall for *Alsobia* 'San Miguel', a cash award from the Toronto Gesneriad Society

Class 18 – to Carolyn Conlin-Lane for *Petrocosmea flaccida*, a cash award from Nellie Sleeth

Class 19 – to Carolyn Conlin-Lane for *Saintpaulia shumensis*, a cash award from the Greater New York Chapter in memory of Charles Anzalone

Class 20 – to Peggy Adamson for *Saintpaulia* 'Autumn Honey', a cash award from Mary Bozoian in memory of Valerie Miller

Class 21 – to Hans Inpijn for *Saintpaulia* 'Rob's Outer Orbit', a cash award from Violets of the West

Class 22 – to Carolyn Conlin-Lane for *Saintpaulia* 'Heritage Frolic', a cash award from the Puget Sound Chapter in memory of Jeannie Meyers

Class 23 – to Peggy Adamson for *Saintpaulia* 'Ramblin' Rose', a cash award from the Greater New York Chapter in honor of Miriam Goldberg

Class 25 – to Diane Fischer for *Streptocarpus* 'Bristol's Petunia', a cash award from the Delaware Chapter

Class 26 – to R. David Harley for *Streptocarpus trabeculatus,* a cash award from Mary Bozoian in memory of Anne Crowley

Class 27 – to Robert Hall for *Boea hemsleyana*, a gesneriad mug donated by the Tennessee Chapter in memory of Olive & Isham Byrom

SECTION D – Gesneriads Grown Primarily for Foliage or Fruit

Class 28 – to Pat Couture for *Episcia* 'Malaysian Ruby', a cash award from Jean Miller

Class 29 – to Robert Hall for *Episcia* 'Cleopatra', a cash award from the Greater New York Chapter in memory of Phyllis Rosenbluth

Class 30 – to Mary Bozoian for *Chirita sinensis* dwarf, a cash award from Dale Martens

Class 31 – to Bob and Dee Stewart for *Columnea cruenta*, a cash award from Dale Martens

Class 32a – to Julie Mavity-Hudson for *Pearcea hypocyrtiflora*, a cash award from Norma & Norman Chenkin

Class 32b – to Carol Ann Bonner for *Sinningia canescens* × *leucotricha*, a cash award from the Gloxinia Gesneriad Growers in memory of Dale Munger

SECTION E – Miniature Gesneriads in Flower

Class 33 – to Carolyn Conlin-Lane for *Sinningia* 'Cherry Chips' hybrid, a cash award from the Greater New York Chapter in memory of Martin & Zelda Mines

Class 34 – to Dale Martens for *Sinningia* 'White Sprite', a cash award from the Twin Cities Chapter

Class 35 – to Marlene Beam for *Phinaea* species USBRG 96-336, a cash award from the Twin Cities Chapter

SECTION F – New Gesneriads

Class 37 – to Maryjane Evans for *Chirita* species nova (*tamiana* ined.), a cash award from David, Colleen, and Nolan Turley

Class 38 – to Maryjane Evans for *Chirita gemella*, a cash award from Jim & Linda Golubski

Class 39 – to Mary Bozoian for *Chirita* 'Hotei', a cash award from the Connecticut Chapter

Class 40 – to Maryjane Evans for *Petrocosmea* 'Momo', a cash award from the Connecticut Chapter

SECTION G – Lesser-Known Gesneriads Seldom Grown or Seen in Shows

Class 42 – to Vivian Scheans for *Sinningia douglasii* (exhibited as *micans*), a cash award from Lee Linett in honor of the judges and clerks

SECTION H – Collections of Gesneriads

Class 43 – to Jill Fischer for *Episcia* 'Cleopatra', *E.* 'Unpredictable Valley', and *E.* 'Pink Dreams', a cash award from Lee Linett in honor of Molly Schneider and the Tennessee Gesneriad Society

SECTION I – Novice

Class 46 – to Audrey Longhurst for *Sinningia concinna*, a cash award from Elaine Niece

Class 48 – to Kathy Spissman for *Chirita* 'Kazu', a cash award from Norma & Norman Chenkin

Sinningia 'White Sprite' exhibited by Dale Martens awarded Best Tuberous & Best Miniature

Chirita 'Kazu' exhibited by Kathy Spissman awarded Best Novice

Division II – ARTISTIC

SECTION J – Arrangement of Fresh Cut Plant Material

Class 50 – to Lee Linett for "The Nashville Opera Company Season", a cash award from the Toronto Gesneriad Society

Class 53 – to Paul Kroll for "Walkin' after Midnight", a cash award from the Toronto Gesneriad Society

Class 54 – to Karyn Cichocki for "All Shook Up", a cash award from Paul Kroll in honor of Monte Watler

Class 55 – to Bob Clark for "Tennessee Waltz", a cash award from the Toronto Gesneriad Society

SECTION K – Arrangement of Growing Gesneriads

Class 56 – to Karyn Cichocki for "Blackberry Winter", a cash award from the Toronto Gesneriad Society

Class 57 – to Karyn Cichocki for "Flying Saucer Dude", a cash award from the Toronto Gesneriad Society

SECTION L – Growing Material in a Planting (Artistically and Horticulturally Balanced)

Class 60 – to Miriam Greene for her terrarium, a cash award from Helen Bortvedt in memory of Jeannie Meyers

Class 62 – to Carolyn Conlin-Lane for her trained *Chirita linearifolia*, a cash award from Monte Watler

Division III – THE ARTS

SECTION M – Photography

Class 65 – to John Evans for his color transparency of *Dalbergaria ornata*, a cash award from Josephine Stefaniak

Class 66 – to John Evans for his color print of *Columnea filipendula*, a cash award from MJ & Dave Tyler

Class 67 – to Ron Myhr for his black and white print of *Sinningia* 'Amizade', a cash award from the Liberty Bell Chapter

SECTION N – Crafts Representing Gesneriads

Class 70 – to Karyn Cichocki for her pressed flower picture, a cash award from Rita Sendic in memory of Ben Sendic

Division IV – COMMERCIAL AND EDUCATIONAL

SECTION O – Commercial

Class 71 – to Lyndon Lyon Greenhouses, a cash award from Paul Kroll in honor of Monte Watler

SECTION P – Educational

Class 73 – to Wallace Wells for "Sinningia Tubers and their Ecology", a cash award from Molly Schneider

Class 75 – to Ron Myhr for "Decorative Bracts and Calyces", a cash award from the Greater New York Chapter in honor of Irwin Rosenblum

Flower show photos courtesy of Jeanne Katzenstein, Dale Martens, Michael Riley, Stan Schwartz, and Jerry Vriens.

Convention photos courtesy of Maryjane Evans, Jeanne Katzenstein, Molly Schneider, and Paul Susi, Norman Chenkin, David Tyler.

Streptocarpus—From Habitats to Hybrids

Martin Kunhardt, Wahroonga
Box 144, Merrivale 3291, Natal, Republic of South Africa

Classification

In the genus *Streptocarpus* there are known to exist more than 140 species. New species and forms are found in isolated areas where the plants have been evolving steadily as climate and habitats change. About 30 of these species are described as unifoliate and the remaining, either rosulate or partially unifoliate depending on the number of leaves that are produced and whether the plants die after flowering or not. Streptocarpus all share the same chromosome count $2n=32$ (except *S. variabilis* from Madagascar which has a count $2n=48$). This means that all streptocarpus with the same chromosome count are compatible and can be hybridised, in theory anyway. For this reason, nearly all streptocarpus that are available to the trade today are hybrids, although there is a renewed interest in species especially among hobby growers in the United States and Europe. Unfortunately, on the African continent where this genus is endemic, these plants are hardly known, and therefore their status in the wild is not known.

The two main groups in *Streptocarpus* subgen. *Streptocarpus* are the rosulate and unifoliate forms. Among the unifoliates these can again be divided into monocarpic unifoliates and perennial unifoliates. The vegetative differences in *Streptocarpus* species are never so great that plants can easily be identified at first glance. Rosulates and unifoliates have characteristics that separate them, but only when they flower can the plants be identified with any degree of accuracy. When streptocarpus plants are first seen in their natural habitats, they may not be easily recognisable especially when they are "dormant" or in their rest phase. Mature unifoliate plants will shrivel and start dying off from the tips until very little green leaf material is visible. These plants are often covered with leaf mold and dry mosses and until they start active growth, the plants will be hidden. Immature unifoliates are almost indistinguishable from rosulate seedlings, and it is only when the active growth of the plants commences that we notice the main leaf "stretching" and the other cotyledon remaining very small and insignificant. A very illustrative diagram is shown in the definitive book *STREPTOCARPUS* by Hilliard and Burtt. In the patterns of growth chapter, the initial growth of both unifoliates and rosulates are shown. The perennial unifoliates such as *S. daviesii* and *S. pentherianus* display all the characteristics of the monocarpic unifoliates until the mature leaf starts dying and the lamina of the next year's leaf grows out over that of the current season.

Geographical Distribution

Plants in the genus *Streptocarpus* are found from southeastern South Africa where *S. rexii* occurs, up the eastern third of the continent as far north as southern Ethiopia. Despite the widespread range of this genus, the species have ecological requirements that are similar. Most require shading during the periods of hottest sun and are not found where competition from other plants is severe. Plants occur at altitudes of nearly sea level up to over 5500 ft where the aptly named *S. montigena* is found. (Both of these species are rosulate and have numerous leaves.) *Streptocarpus* is a genus of plants that prefer broken and hilly country where there are streams and river gorges rather than flat and featureless country. The sides of mountains and hills and

not the tops are more suited for streptocarpus because generally there is more suitable habitat on slopes than on the peaks. No *Streptocarpus* species enjoy standing in water while even the water-loving *S. fanniniae* should have oxygenated water around its root zone if the plants are to survive. This species is the only one to tolerate being grown in or near water in the Kwazulu-Natal midlands of South Africa.

Habitats

Streptocarpus is a genus consisting of herbs with shallow and fibrous root systems that need adequate moisture at the root zone during the summer growing period. They are found in shaded, forested areas or in rocky, open grassland on south-facing slopes where habitat conditions are suitable and competition from other plant species is limited. In their forest habitats, plants are found on stream banks, rocky outcrops and on tree trunks, wherever their roots have good drainage and partial shade. This statement is very general and often plants can be found in unexpected habitats such as disturbed road cuttings on hillsides. Most unifoliates prefer to grow on moss-covered rocks, steep earth banks and very occasionally as epiphytes. The unusually large leaves need some support to prevent the midrib from snapping when the leaves grow to their maximum size. (This also allows the plants to shade a large surface area under which its roots are protected and can remain moist during dry periods.)

Weathered rock surfaces often provide habitats where certain streptocarpus find suitable areas to colonise. Shale and slate-type rock are inhospitable for streptocarpus, and where there are different geological formations in an area, the rock should be the "right type", such as sandstone or weathered granite before plant colonies can be expected. Pockets of humus and soil that collect in cracks or depressions in or under weathered rock are ideal situations where adequate moisture can collect and nurture young plants. The perennial unifoliates such as *S. polyanthus* and *S. daviesii* have tough and "leathery" leaves that allow them to grow on level sandy soil as well as rock

Streptocarpus primulifolius enjoying its rock habitat

Streptocarpus silvaticus
growing high on a tree

S. pentherianus and *S. haygarthii*
growing on cool, moist rocks

crevasses and vertical cliffs. The small *S. silvaticus*, which is another one of the perennial unifoliates, can usually be found growing on tree trunks up to twelve feet off the ground.

In areas where conditions are suitable, one can find up to six different species growing "on top of each other". These include the water-loving *S. fanniniae* on the stream-bank, and the often-lithophytic *S. gardenii* and *S. haygarthii* on the moist and cool moss-covered rocks. The large-leaved *S. grandis* will grow on sloping earthen banks, and the epiphytic *S. silvaticus* on the tree trunks. At the edges of the forest patch, often on rocky outcrops and cliffs grows *S. polyanthus*. The described habitat would comprise a stream with steep banks sheltered by a canopy of large, rough-barked trees. Ideally, the forest would be on a south-facing slope with rocky outcrops where the weathered granite provides shelter for begonias, ferns, orchids and streptocarpus. The competition from other plant species is limited near the stream where the majority of streptocarpus occur, but further into the forest the competition increases and streptocarpus plants are crowded out. On the cliff face, competition drops away and allows the habitat-specific plants space to colonise. Forests offer a greater diversity of microhabitats than rock outcrops, and this explains why forest areas are favoured by the majority of *Streptocarpus* species. In SE Africa, the prevailing rain-bearing winds blow from the southeast or southwest. The moist rock faces are often shaded from the afternoon sun and even in forest areas, streptocarpus are often found on slopes or tree trunks facing the prevailing winds. Hilliard and Burtt have a diagram (page 5l, Table 3) illustrating the occurences of different species in selected forest areas in southern Africa.

Propagation

Streptocarpus have twisted seed capsules that contain large numbers of fine seeds that are shed in stages as the dry capsules "untwist", usually towards the end of summer or in early autumn in the case of the summer-

flowering species that depend on summer rainfall. The winter-flowering species *S. kentaniensis* will shed its seed nearer the end of winter when the seed can make use of spring rains and sufficient moisture levels. In the areas where these plants grow, the rainfall patterns are mixed although rain can be expected at any time of the year. This species is the only one to flower in midwinter, and vegetatively it is very easily recognised because of the narrow laminas and very prominent midrib. The companion plants of this species are sansieverias, peperomias, and crassulas which indicates that it is drought hardy and has a unique water storage method, something that may seem odd when considering that the seedlings hardly differ from other seedling streptocarpus.

Most streptocarpus make use of damp moss where the seed may fall and germinate easily without too much competition. The seedlings are usually visible to the naked eye after ten days when small green dots appear on the surface. Considering the amount of seed that is carried in each capsule and the number of plants that reach flowering size, it can be assumed that the large quantity of seed allows for a low success rate.

Vegetative propagation is also a way some species can increase their numbers although this is uncommon among the wild-growing plants. Those that have a rhizomatous root system such as some *S. polyanthus* species and *S. fanninae*, often have plantlets that appear from the roots or "stems". Some rosulate plants that have their leaves broken off can produce small plants from the broken ends, but this method almost never happens in the plants' natural habitats.

Present Status

This genus has been in cultivation since the early 1800's when *S. rexii* was first introduced to Kew by a Kew collector, James Bowie. Since then, many new species have been "discovered" and named. Even today there are new species that are being located in isolated areas where botanists have never travelled. Some of these species may share the characteristics of other known species but they may have different flowering times or habitat requirements as well as not fitting with any of the currently known species. These plants may have evolved separately from their nearest "cousins" and now have certain features that will warrant being classified as their own subspecies.

Some areas where streptocarpus are found are on isolated rock-strewn mountains where the pollinating agents are often very localised. This can and does lead to species differentiating from others over thousands of years. A good example of where a single species has been separated by a river and has developed flower colours is *S. kentaniensis* whose habitat is divided by the Kei River. It is not impossible to cross, but the pollinators are localised and do not cross the 100-metre wide river to cross-pollinate flowers of the same species.

Habitat modification and the introduction of exotic alien vegetation that competes have threatened some species of *Streptocarpus*, bringing them dangerously close to the point of no return when they will be listed as extinct in their natural habitat. In the Red Data List that was put out by the South African Botanic Institute, there are ten species listed as being under threat. One, *S. davyii* has been officially classified as "extinct" in its natural habitat in Swaziland. In all likelihood, there are some small pockets with this "extinct" species scattered about the area in places that are inaccessible for

Streptocarpus fanniniae
(photo by Chris Kunhardt)

Streptocarpus rexii
(photo by Chris Kunhardt)

humans and their domesticated livestock. Cattle seldom cause much direct damage to streptocarpus colonies, but they open up areas where goats and sheep can penetrate and destroy nearly all the vegetation. Stream banks and other habitats where the shade-loving plants colonise are severely degraded and left open for invasive plant species to compete with whatever plants are left behind.

Since this book on Red Data species was compiled in 1996, other *Streptocarpus* species have been threatened because of over-exploitation, extensive habitat destruction or other environmental disturbances. Global warming modifies the natural environment, increasing hot and dry temperatures which can cause natural extinctions.

With all plants in the genus *Streptocarpus* sharing a common chromosome count, it is possible that natural hybridisation will take place if two or more species share the same habitat. In Hilliard and Burtt's book (Plate 16) there are six interspecific hybrids that have been made and photographed which indicates how easily species can be hybridised with each other. One natural hybrid that was collected by my late father, Chris Kunhardt, is unusual because the two parents are a unifoliate and a rosulate—*S. bolusii* and *S. johannis*. Although this plant is now self-sterile (it does not produce any pollen and therefore does not produce any seed), the plant has rosulate characteristics with the flowers resembling those of the *S. johannis* parent while the leaves look a little like those of *S. bolusii*, dark green above and deep red underneath. This probably indicates that the rosulate species have stronger genes than the annual unifoliates?

Conclusion

Streptocarpus have been recognised as commercial potplants since 1855 when hybrids were first made between *S. rexii* and *S. gardenii*. These were made without any of the modern diversification available to today's breeders. Since the first hybrids were introduced, the world has undergone many changes such as the exploration and discovery of "new" lands and the introduction of modern transport methods. Social and economic fluctuations have changed the preferences that people have for flowers, but the overall demand has increased. The need for new plants has increased dramatically with streptocarpus enjoying a steady market share. But surveys indicate that their popularity is waning perhaps because the plants have lost their identity on account of not having new introductions to breed with. As natural habitats fall victim to man's unceasing demands for land to settle and to cultivate, many habitat-specific plants will join the list of extinctions in their natural environments. We have to know the plants and where they come from to get the maximum from them in terms of information that will be useful for study and breeding. Collections of species plants must be made so the genetic makeup can be saved and the popularity of streptocarpus increased with new hybrids and forms of plants.

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World-Wide Streptocarpus Hybridizers

Dale Martens <martens@wt.net>
2728 Masters Drive, League City, TX 77573

As editor of the Gesneriad Hybridizer's Association newsletter, *CrossWords*, I was asked to write about the current streptocarpus hybridizers throughout the world. Many of the following people are corresponding with each other, comparing results, and sharing seed. Many of the hybrids that will be mentioned are featured on the AGGS web site and/or on Ron Myhr's Gesneriad Reference Web.

South Africa

I must begin this article honoring Martin Kunhardt from Natal, South Africa, who is the person most responsible for introducing many *Streptocarpus* species to us. He not only collected, grew, and distributed *Streptocarpus* species, but hybridized them, also. He is one of the first persons who was aware of the benefit of using species for improving hybrid streptocarpus. He's produced many hybrids, several of which were distributed to the world, and he has donated many seeds which are available through the AGGS Seed Fund. I encourage you to look through old issues of THE GLOXINIAN and *CrossWords* to read of his hybridizing efforts.

Michelle Burt and Robert Kunitz from South Africa have made some interesting hybrids, and a slide of a beautiful double was shown at the Chicago Convention. They recently sent slides and photos for the '99 Convention GHA meeting. They have been using *S. montigena*, a perfect rosulate, onto others with rosulate forms such as *S. baudertii* and onto a form of *S. meyerii* in order to produce hybrids with lovely, neat leaf arrangement with small size. *S. montigena* onto *S. fasciatus* produced plants which become quite massive in the shade, smaller in bright light and are quite floriferous with almost incandescent, shiny blue flowers of different shades and forms representing both parents. They've also produced a *S. montigena* hybrid with unusual blotches of color on the blossoms which they'll watch to see if it's stable.

Robert Kunitz and Jaco Truter have gone on weekend trips in search of new streps and for seed gathering. Jaco is an ardent orchid enthusiast and in his years of collecting wild orchids in the field had seen numerous *Streptocarpus* species. When the strep bug finally did bite, he simply retraced his orchid trips to collect the wild strep species. At one time he had about 90% of the South African *Streptocarpus* species, and he hybridized them as well as crossed the species with complicated hybrids. One of his letters tells that, in his experience, *S. vandeleurii* when crossed onto the other species and hybrids imparts its perfume, large flower size and shape as well as softens the color of the seedlings into a pastel version of the seed parent. He says *S. vandeleurii* is best used as a pollen parent because as a seed parent the resulting progeny tend to have a weak leaf and rot. That's beneficial to know since GHA has an exciting group project hybridizing for fragrance with John Boggan's *S. vandeleurii* pollen donated to all who asked for pollen. Jaco mentions that using *S. fasciatus* is good because it is extremely heat tolerant, very floriferous, and produces bars, spots, stippling, and iridescence to its progeny. Jaco's hybridizing goals include compact/small size and leaf, heat resistance, unusual shades of blue, with his priority being an extended flower season.

Streptocarpus 'Franken Kerry's Gold'
IR98540 — Frank Davies & Ken Jones

Streptocarpus 'Upstart'
IR98554 — Chris Rose

Streptocarpus 'Al's Pal'
IR98557 — Dale Martens

Streptocarpus 'Chrismas Morning'
IR99589 — Jonathan Ford

Great Britain

If you've ever seen a **Dibleys Nurseries** catalog, you'll know why they've been Gold Medal winners at the Chelsea Show so many times. This is a family-run nursery in North Wales, Great Britain. Their 1998 catalog displays 45 two-inch-square color photos of stunningly beautiful streptocarpus plants. Each year they introduce new hybrids. *Streptocarpus* 'Rhiannon' is a white bell-shaped blossom with a yellow center with purple stripes. I'm told a trip to Great Britain isn't complete until you see their nursery where specimen plants are on display and quite a variety of flowering plants are for sale.

Chris Rose, a zoology graduate, has grown streptocarpus since 1984. Aware of the narrow genetic base of today's hybrids, he has stepped up his hybridizing work using an increasing variety of species to bring "novel" characteristics into his breeding lines. Smaller-sized plants, true reds, red and white bicolor, spotted and "fantasy" flowers, an enlarged yellow zone on the limb, scent and purple leaf undersides are current objectives. His work is featured on the Gesneriad Reference Web website, in *CrossWords* and elsewhere. His first registrations, recorded last year, include 'Dark Secret', 'Hannah Ellis', 'Old Rose Wine' and London show prize-winners such as 'Gambit', 'Piccadilly Line' and 'Violet Showers'. He can be contacted at 26 Devonshire Road, Bristol, England BS6 7NJ or chrisrose@gn.apc.org. Chris has donated a tremendous variety of hybrid seed to the GHA Seed Fund.

Ken Jones is a retired coal miner living in Staffordshire in the heart of England. Seeing the end of his mining days coming along some years ago and looking for new interests in plants he had not grown before, Ken embarked on the growing and showing of streptocarpus. After some measure of success he decided to hybridize, taking 3 to 4 years before he achieved any worthwhile results. All this time he was trying to gather material and information which did not seem very forthcoming. A number of varieties are now accredited to him, including seven hybrids registered in 1996.

Frank Davies is an old friend of Ken's from earlier gardening days. They met up again by chance some five to six years ago resulting in Frank starting on the same path as Ken in growing streps. The results of Frank's first breeding are now coming to fruition. *Streptocarpus* 'Mary', an intense blue on the lower three petals, paler on the upper two with tracing, may be a little on the large side for U.S. growers. *Streptocarpus* 'Frances' is a deep pink and is slightly paler around the well-pronounced veining. This one is also producing very good seedlings in pastel colors with this very fine marking on the petals. Ken and Frank have joined forces concentrating on more breeding lines using Frank's larger growing area. Last year they decided to prefix their new varieties as "Franken", a combination of their first names. Recent introductions include, 'Franken Kerry's Gold' which is a very lovely peach-pink with a good yellow throat which holds its color very well. This variety is much sought after in England. Ken and Frank are currently trying to form a British Society.

Japan

Toshijiro Okuto is a horticulturist working for Hyogo Flower Center and Awaji Farm Park in Hyogo Prefecture, located in the western part of Japan. He started hybridizing streptocarpus in early 1990. Having grown species *Streptocarpus*, he became aware of potentialities of them to be introduced into hybrids. He crossed species with each other and with cultivars, and got interesting results and characteristics. He released some named

hybrids in Japan. Because of restrictions on his recent duty, he is now concentrating on improving yellow color and small-sized hybrids. He has produced hybrids with a big yellow center and one with yellow on each of the lobes, though yellow on the upper lobes is faint. He's also made small-sized hybrids using *S. meyeri, S. johannis* and *S. kentaniensis* that he is releasing not far in the future.

New Zealand

Margaret Gurr from Christchurch, has contributed very interesting seed to the GHA Seed Fund. She has experimented with x-raying strep seed and has gotten interesting colors on her hybrids. One particularly fascinating cross she produced is a dark plum with a wide band of lighter plum edging on all petals. A photo of that plant was on display at the GHA meeting in Chicago. Also on that display was a photo of a cross of *S. dunnii* grown from seed given to her by Chris Kunhardt years ago which was crossed with *S.* 'Royal'. The resulting seedling had at least 27 bright cherry-colored flowers with white lines in the throat. We hope Margaret continues to experiment!

Susan Turner from Matakana Island, has been hybridizing for scent. She donated several packets of seed to the GHA Seed Fund which included crosses using the fragrant species *S. vandeleurii, S. candidus*, and *S. wittei*. This is quite exciting, and we look forward to getting reports of the outcome of these crosses.

Canada

I asked Monte Watler about the Canadian hybridizers and he reports that **John Duncan** started out growing seeds from a friend. After reading the Royal Horticultural Society's Wisley Handbook, *Streptocarpus*, written by Rex and Gareth Dibley, John began hybridizing. He had *S.* 'Black Panther' and crossed it with Lyndon Lyon's *Streptocarpus* 'Bright Eyes' (blue with a yellow throat). This resulted in many varied colors and patterns, with the most impressive seedling being a yellow strep with an outer fringe of blue. He has since used this in all of his hybridizing. Monte introduced me to John Duncan at an AGGS Convention. John's enthusiasm for hybridizing is infectious and our talk was pure joy for me!

Monte also gathered information about **Paul Lee**, a new member of the Toronto Gesneriad Society. Paul has a commercial greenhouse in Fergus, Ontario. His streptocarpus hybridizing goals include smaller leaves, longer stems and new, exciting bicolors. Paul feels there is great potential in using streps in cut flower arrangements. He has one hybrid ready to register with the name, *Streptocarpus* 'Victorian Lace'.

The United States

Jonathan Ford at Rock Bottom Farms in Middleton, Ohio, is the most well-known American hybridizer of *Streptocarpus*. Judy Becker reports that Jonathan has recently registered 147 of his hybrids. His hybrids show a wide variety of colors and shapes with *S.* 'Joker' as an excellent example of his efforts to produce eye-catching, floriferous and highly desirable plants. In addition he has created the double deep pink blossomed *S.* 'Double Raspberry Parfait' and *S.* 'July Fourth' a deep rose-pink flower heavily streaked in white and cream. When the new *Streptocarpus* Register is available you will understand the tremendous effort Jonathan has gone to in order to provide us with phenomenal beauty!

Michael Kartuz, of Kartuz Greenhouses in Vista, California has been growing streptocarpus for over 40 years, recalling they were introduced to him by Elaine Cherry and possibly even Elvin McDonald. Elaine gave him a red flowered strep, its name lost to memory, but from that plant he developed *S.* 'Captain Blood' and other salmon-red shades. He's introducing its successor called, 'Ken's Super Red', (named after Ken Schaffer of Los Angeles who grew one of his seedlings). It's perhaps a shade lighter, but more vigorous than *S.* 'Captain Blood'. Michael has been striving towards deeper salmon shades devoid of blue overtones. *Streptocarpus* 'Coral Comet' is his latest achievement. Of course, we can always hope that eventually near-orange or yellow shades can be accomplished. *S.* 'Strawberry Crush' is in that direction. In general he's been working with the popular and large flowered grandiflora types rather than multiflora types. He's always looking for new species and varieties to add to his gene pool, hoping to create more sturdy, more compact, more free-flowering varieties with new colors, forms, and perhaps heat tolerance.

Lyndon Lyon Greenhouses in Dolgeville, New York has provided a steady supply of new *Streptocarpus* hybrids for many years. Lyndon wrote an article for *CrossWords* in the summer of 1978 telling how he was so fascinated with seeing tiny *S. cyanandrus* at an AGGS Convention that he used it to hybridize, first planting seed in 1972. The best of the seedlings from these crosses were named Cape Beauties. The current Lyndon Lyon Greenhouses catalog lists over 40 Lyon hybrids, many of them produced by Sidney Sorano, also well known for her African violet hybrids.

Dr. Ralph Robinson, awarded the Bronze Medal from AVSA for his achievements in hybridizing African violets, has been hybridizing streptocarpus since 1991. The "Bristol" series, as his catalog states, "has foliage that is usually glossy and flat", and "bloom stalks that are short, stiff, and upright", and "typically bear 4-6 or more blooms each". Many of his recent hybrids feature non-dropping semi-double to fully double flowers. These are hybrids developed for the home light gardener in mind. He is currently working on producing many more double-blossomed and compact-growing varieties. Visit his web-site at www.robsviolet.com to view these hybrids.

Connie Leifeste developed an interest in streptocarpus from participating in many film projects at the flower shows of Europe. After having moved to Texas in 1991, she was dismayed how the intense heat, drought conditions and frequent lack of seasons devastated most US hybrids. Thus, began her interest in what might be accomplished with the arid species in developing a more heat-tolerant strep. Since information collection was the integral first step in forming specific hybridizing goals, she contacted field collector Jaco Truter who described natural habitats in correspondence from South Africa. Hybridizers Dale Martens, Chris Rose and Clay Anderson shared observations and offered suggestions. The literature, particularly the works of J. D. H. Lawrence and the book *STREPTOCARPUS* by Hilliard and Burtt, provided an indispensable knowledge base. Lastly, the AGGS Seed Fund and CrossWords seed banks were valuable resources for the plants selected. "It's like reinventing the wheel in some respects", Connie relates. "The trials and errors of finding a good genetic mix among these hardy species and carefully selected hybrids should produce results over the long term."

Dale Martens — now it's time to describe my hybridizing adventures. My hybridizing goals for the past five years were miniaturizing streps by using *S. kentaniensis* and *S.* 'Joker' and creating doubles by using *S.* 'Double Raspberry Parfait'. The *S. kentaniensis* cross produced two good hybrids,

S. 'Gator's Tail' which won Best Streptocarpus as grown by Nancy Maybloom at the 1998 AGGS Convention and 'Lavender Rosette' which has been winning blue ribbons as grown by Pat Richards. The *S.* 'Joker' crosses produced two compact award winners: the AGGS 1997 Convention's Best New Introduction, *S.* 'Petite Pink' and the 1998 Best New Gesneriad, *S.* 'Texas Fantasy' with splashes of a lighter color on a darker background. The *S.* 'Double Raspberry Parfait' × *S.* 'Blue Mars' resulted in a semi-double blue ribbon winner at the 1998 Convention named *S.* 'Al's Pal'. Currently I've made some interesting hybrids by crossing *S.* 'Al's Pal' with an unnamed wine-purple semi-double. Normally semi-doubles have no pollen, but I found one distorted pollen sac on the wine-purple blossom.

There are several other Americans who are hybridizing streps and/or donated seed to GHA including Sharon Holtzman, Clay Anderson, Pat Richards, Alan LaVergne, Maryjane Evans, Jeff Smith, and Louis Paduch who is the hybridizer of the beige-peach *S.* 'Georgette'. It would seem that there is new energy in streptocarpus hybridizing with activity in the next few years providing a tremendous variety of new colors, shapes and smells. If you are hybridizing streps, please share with me the information you've acquired concerning genetic dominance.

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Botanical Review Committee—Report #20

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Alain Chautems, 1997. New Gesneriaceae from São Paulo, Brazil. *Candollea* 52: 159-169.

In the course of preparing a treatment of Gesneriaceae for a flora of the state of São Paulo, Brazil, two new species of *Codonanthe, C. cordifolia* Chautems and *C. venosa* Chautems, along with a new species of *Sinningia, S. hatschbachii*, are described. A new name, *Sinningia areneosa* Chautems, is presented to replace the name *Rechsteineria pusilla*, which cannot be transferred to *Sinningia* because the name *Sinningia pusilla* is already occupied. A plate of *Sinningia* insularis is also published for the first time. A key to the species of *Codonanthe* in the Brazilian coastal rainforest is provided. Illustrated.

Carl D. Clayberg, 1996. Interspecific hybridization in *Sinningia* (Gesneriaceae). *Baileya* 23: 184-194.

Twenty-two species of *Sinningia* were crossed in all possible combinations. One hundred and two hybrid combinations were obtained, and their fertility was studied, as was the inheritance of interspecific differences. *Sinningia* consists of two types of species: bee-pollinated species, belonging to a number of small cenospecies, each containing one to a few species (a cenospecies is a group of species capable of forming partially or fully fertile hybrids); and bird-pollinated species, mostly belonging to one of two larger cenospecies, each containing a diversity of species. Based on the relatively small numbers of genes controlling pollinator-specific floral differences between species within cenospecies, cenospecific limits are recommended as a good guide to sectional limits in future revision of this genus.

Martin Freiberg, 1998. Two remarkable new species of *Gasteranthus* (Gesneriaceae) from Central Ecuador. *Phyton* (Horn, Austria) 38: 167-173. Illustrated.

Two new species of *Gasteranthus, G. magentatus* and *G. otongensis*, are described from the province of Cotopaxi. *Gasteranthus magentatus* is a small herb with magenta flowers, and is similar to *G. trifoliatus*. *Gasteranthus otongensis* is a subshrub with yellow flowers and superficially resembles *G. quitensis*. *Gasteranthus otongensis* has only been collected in the Bosque Protector Otonga (Otonga Forest Preserve).

Lars P. Kvist, Laurence E. Skog, and Marisol Amaya-Márquez, 1998. Los generos de Gesneriaceas de Colombia. (Gesneriaceae of Colombia) *Caldasia* 20: 12-28. In Spanish with English abstract. Illustrated.

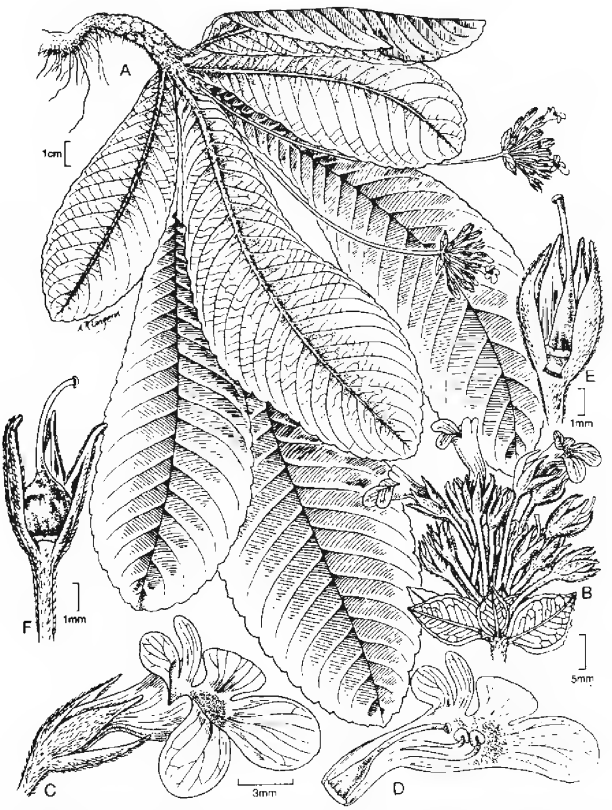
The family Gesneriaceae is represented in Colombia by 32 genera and approximately 400 species. Many of the genera lack modern revisions and the number of species can be expected to grow. The most species-rich areas in Colombia are the Pacific coastal forests and in the central Andes of Antioquia and Risaralda. A key to the genera in Colombia is presented, and a brief discussion of each genus is given.

Laurence E. Skog and Lars P. Kvist, 1997. The Gesneriaceae of Ecuador, pp. 13-23. In: R. Valencia & H. Balslev (editors), *Estudios sobre Diversidad y Ecologia de Plantas, Memorias del II Congreso Ecuadoriano de Botánica.* Quito, Ecuador: Pontificia Universidad Católica del Ecuador.

The family Gesneriaceae is represented in Ecuador by 29 genera and more than 200 species. Most of the species are found in montane rain or cloud forests. A key to the genera occurring in Ecuador is presented, along with a brief description of each genus.

Laurence E. Skog and Flavia F. de Jesus, 1997. A review of Resia (Gesneriaceae). *Biollania* (Edición Especial no. 6): 515-525. Illustrated.

The poorly known and rarely collected genus *Resia* is reviewed. There are two species, *R. nimbicola*, from Colombia, and *R. ichthyoides*, previously known only from Venezuela. A new subspecies, *R. ichthyoides* subsp. *bracteata*, is described from Colombia. The presence of bracts in this subspecies suggests that the genus *Resia* does not belong in tribe Beslerieae, which is characterized by lacking bracts. On the basis of this and other characters, the authors suggest that *Resia* would be better placed in tribe Napeantheae.



Resia ichthyoides subsp. *bracteata* illustration from *Biollania* 1997

Gesneriads, The Internet and You

David Turley <webmaster@aggs.org>
6118 Windsor Dr., Fredericksburg, VA 22407

We've been back from the AGGS Convention in Nashville for a week now, and the amazement of the whole thing is still fresh in my mind. The Tennessee Chapter did a great job of hosting this year's bash. Thanks y'all! The flower show was excellent, the plant sales room was overwhelming, and the people as friendly as ever. If you missed the festivities, well, I'm sorry. Don't make the same mistake next year!

It was a pleasure meeting so many of my "online friends" and putting faces with the names. As usual we had our annual Internet Communications Meeting, and the room was filled to standing room capacity. I am greatly pleased that so many of you enjoy AGGS' online presence. Thanks for all the great suggestions many of you passed on as well. At this meeting I reviewed the key points from my report to the AGGS Board of Directors. I'll repeat the points here for those of you who weren't able to attend the ICC meeting.

Secure Server

In September 1998, AGGS expanded our hosting contract with Hway Net to include access via a secure web server. The server uses Secure Socket Layer (SSL) to encrypt transmissions between the web server and a visitor's web browser software. SSL is an industry standard encryption protocol. The standard is used for all AGGS online forms that collect credit card information to protect that information from unauthorized retrieval.

The online membership application was modified to make use of the secure transmission capabilities. This continues to be one of the site's most-used features. When visitors access the online membership application/renewal form, they complete the form. When the form is submitted, a completed application is returned to the web browser. At this point they are given the option to either print and mail the form, or to complete the credit card information and submit the form electronically via the secure connection.

Many people registered for the convention using the online form as well. This was a great convenience for those of us who waited till the last minute.

New Photographs

Thanks to the extreme generosity of Toshijiro Okuto, 73 new photos of species *Streptocarpus* were added to the site. The photos are grouped together in the "photo gallery" for easy viewing.

Message Forums

New gesneriad message forum software was developed and installed in February 1999. The previously used software was a free script offered by our ISP. Unfortunately it was hard to maintain and was found to contain several gaping security holes. The new bulletin board script was written to include capabilities for multiple topic forums and easier maintenance features. As time allows, archiving capabilities may also be added to allow the viewing of older posts.

This feature of the web site is extremely popular with our visitors. I appreciate the efforts by those members who regularly answer posted questions, and I encourage other members to follow their lead.

Online Auction

This year marked the fourth annual online auction to benefit the Frances Batcheller Endowment Fund. This year's auction raised $1,094 and included what I believe to best our best selection to date. Three categories of items were offered. We were able to offer a tempting list of rare gesneriad seed from Maryjane Evans and the AGGS Seed Fund, two collections of new hybrids from Masaki Yamagata, donated by Masaki Yamagata and Dale Martens, a collection of new *Columnea* hybrids donated by Jerry Trowbridge, a selection of rare plants from Maryjane Evans, and new *Kohleria* and *Chirita* hybrids from John Boggan. In addition, we had a varied selection of hard-to-find books donated by Maryjane Evans, Sharon Holtzman, Connie Leifeste, Dale Martens, and Patrick Worley.

Gesneriad Message Corner

Here are some recent posts for the enjoyment of those who do not have Internet access:

Daniel Steele asked about growing gesneriads from seed:

"I have returned to the world of gesneriads after about 10 years. I've been ordering from the Seed Fund to get some of the plants I used to have. I've had very good luck.

"My problem: I cannot get the larger gesneriad seeds {i.e., columneas and aeschynanthus) to grow. I've tried the 1-1-1 mix and sterilized perlite and vermiculite. I've tried sterilizing the seed with a 5- and 10-minute soak in a 10% bleach solution and also peroxide. The seed molded in the 1-1-1 mix. I did get some to germinate when I sterilized the seed, but the seed coat would not split to let the seed leaves out or the seed coat would split but the root wouldn't come out. I'm thinking of trying to sow onto gelatin that I would make with the unflavored stuff you buy at the store and add a weak fertilizer and fungicide. I would appreciate any advice on how to go from here. By the way, I have fantastic luck with things like sinningias, AV's, achimenes, smithianthas, etc."

Suzie Larouche responded:

"Welcome back to the world of gesneriads, Daniel. Growing from seed is a good way of obtaining a wide variety of plants for a limited cost. It seems strange that you had so much bad luck with your nematanthus and aeschynanthus seed. I always treat mine exactly the same way as all others and they germinate without any fuss: seeds are scattered on the same mix I use to grow, moist but not wet, and under cover, then left to their own devices in a warm spot under the lights. I check every week to see what has come up. Something always does. Last year, I sowed three species of nematanthus and at least one of aeschynanthus. Germination was rapid and excellent. The untold number of seedlings I got made a lot of people happy at lectures I gave. (You might want to be careful about trying to find families for your babies—after they have been hit a few times, some people tend to give you a wide berth whenever they see you with a pot in hand or hear you talk about your seedlings.) If you had a fungus in your seedling trays, it may be that your mix (there is nothing wrong with 1-1-1) was just a little too wet for comfort. Or you may have had a packet of outdated seeds. It doesn't happen often, and gesneriads seeds appear to have a very long life, but you might want to try again. Better luck this time."

Jon Dixon also contributed:

"I'm at a loss to understand why your seeds are not growing well. I find the vines to do as well as any other gesneriad. I have best success germinating and growing under lights. The even light and temperature suits the plants at their delicate stage. First I use a 1-1-1 mix (perlite, vermiculite, sphagnum peat), which I sterilize at a low setting in the oven (135-200°F) for about 3-6 hours. I store the mix in a sealed container so I always have some around. When I plant, I first run hot water through the pot, carefully, to thoroughly wet the mix (trying not to bring up too much perlite). Then I scatter some seed over, saving some seed in case of crop failure (or to share). Some growers then mist the pot to bring the seed into positive contact with moisture. I don't do this. I like to use 3" plastic pots which I enclose in separate zip-lock bags, label and date and put under lights. Germination takes about three weeks, more or less.

"When I see fungus in a seed pot, usually after seedlings are growing, and this usually only happens when I don't follow the procedure above, I go to the medicine cabinet and get the powder aerosol form of Tinactin (1% tolnaftate). This product will kill the fungal growth without damaging the seedlings. I'm not sure if it will inhibit ungerminated seed.

"Seedlings can be transplanted and spaced out in community pots when really tiny. They speed up growth, especially if given a light fertilizing."

I am pleased to announce a new forum in the Gesneriad Message Corner. We've started a French language forum for our French-speaking friends. Thanks to Suzie Larouche in Canada <suzielaro@sympatico.ca> for volunteering for this. Selected posts from this forum will be translated into English by Suzie and reprinted in this column for all to enjoy.

Please visit the AGGS web site at http://www.aggs.org often. We're always adding new "stuff" for your enjoyment. I look forward to reading your post in the message forums soon.

Gesneriphiles members chat face to face in the plant sales room — Vivian Scheans from Oregon, Sue Hodges from Australia, and Toshijiro Okuto from Japan.

Another Satisfied Customer...

I use Dyna-Gro on all of my gesneriads and violets, as well as other plants.

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Oh, I didn't tell you, I won Best Gesneriad with *Sinningia* 'Teddy'.

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The Basics—Your Plants' Environment

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When someone seems to grow perfect plants effortlessly, we say they have a green thumb. When someone kills every plant they try to grow, they complain that they don't have a green thumb. How does one develop a green thumb?

In my opinion, a green thumb is simply a person's sensitivity (either intuitive, or acquired) to the needs of plants. If a plant gets stuck in a cold, dark corner, or is put out to fry in a hot, bright window, well of course it will not do well. If it is placed in an environment where it is happy, it will do well. Unlike your pet cat which can prowl around the house to find the most comfortable spot for a nap, your plants cannot move about on their own. It is up to you to move them until you find the best place for them.

Most of us grow gesneriads in our homes, or in nearby spaces (greenhouse, lath house, garden) which we create for cultivating plants. Most gesneriads have the potential to be called "houseplants" because they have evolved in environments which are similar to the ones we find comfortable. The keys to success in growing gesneriads are:

(1) learning about the environmental needs of various gesneriads;

(2) being aware of the various growing environments that are available to you; and

(3) matching the plant to the environment, and creating or modifying the environment to best suit the plant.

What comprises a plant's environment? In the introduction to this series, I mentioned that plants have a set of basic requirements. All plants need some light—not too little, but not too much. They need warmth, or at least temperatures within a certain range. Plants breathe; they require air, they cannot live in a vacuum. Unlike humans, plants use carbon dioxide as well as oxygen from the air, and require a certain level of humidity, which is the water content of the air. The right amount of water—not too little, not too much—is important for houseplants. Various essential nutrients must be provided for a plant to thrive. A growing medium, soil or a substitute, anchors the plant. It also provides a home for the roots which take up water and nutrients for the plant. A container holds the growing medium and can help regulate other aspects of the plant's environment such as access to water and the temperature of the roots.

How do you find a good environment for your plants? Look around your living quarters or your work space and think about the various aspects described in the above paragraph—light, warmth, humidity for example. I like the concept of "microclimates"—the idea that there are subtle differences in environments that are just a few steps apart. For example, the kitchen or bathroom may be warmer and more humid than the spare bedroom, but the light may be better in the bedroom. You can influence this, of course, by artificially adding heat, light, or humidity to a growing area.

Other aspects of the plant's environment, its water, nutrients, soil, and container, are not specifically part of the "climate" but are more related to the actual work you do for your plants: watering, potting, transplanting, feeding.

Monte Watler, a gesneriad grower par excellence from Toronto, has written a guide to gesneriad growing which covers these basic topics. He has generously given permission for his material to be included in this series. The first installment, on lighting, appears in this issue. Others will follow.

Basic Tips for the Beginning Gesneriad Grower:

- ❀ Keep it simple when you start out.
- ❀ Avoid the tendency to get lots and lots of different plants. There's plenty of time for that later. Begin with a few plants and see how well you can grow them. Learn what their needs are. If one plant struggles or dies, concentrate on growing others that do well for you, then later move on to more difficult ones.
- ❀ Try gesneriads in different conditions, whatever is available to you: various windowsill exposures, under lights if you have them, at home or at work, outdoors if it is warm enough. Learn about the microclimates in your living area.
- ❀ Read about gesneriads and learn about them. Purchase some back issues of THE GLOXINIAN. If you have Internet access, explore the AGGS web site <www.aggs.org>. This site will lead you to other internet resources such as Ron Myhr's web site and the email correspondence club Gesneriphiles.

The Basics—Lighting

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Lighting is a very important facet of indoor gardening. It is essential to the growth and development of healthy plants. During the process known as photosynthesis, light allows the plant to incorporate carbon dioxide from the air with water and nutrients to produce carbohydrates on which the plant feeds. Oxygen, on which we thrive, is then released from the plant. This stockpiling of food takes place only when there is adequate light and the food is then utilized by the plant during darkness.

Most of the houseplants that we grow today were derived from areas all around the world and have evolved under diverse conditions. Many are low-light plants which live under the underbrush of the tropical rainforest, while others are accustomed to direct sunlight. Plants, however, are adaptable, and can be grown quite successfully on the windowsill or under fluorescent lights which, at this time, are still our best substitute for sunlight.

If growing on the windowsill, plants should be placed in such a position that they will not scorch in the summertime, nor freeze in the winter months. This can be accomplished by wide windowsills, by adding an extension to the windowsill, or by placing a table (the same height) in front of the win-

dow. In order to maintain a well-balanced plant, the onerous task of turning the plant one-half turn twice weekly is a requirement.

You should always provide your plants with the best light possible, and this may be a reason for people living in the northern climes to switch their plants from the north- and east-facing (less sunny) windows in the summer to the south- and west-facing (more sunny) windows in the winter months. Direct sun may harm some of your houseplants while being beneficial to others. Read all that you can find on your plants' requirements, and do not fail to ask your friends for advice. Join a plant club and take advantage of its resources.

For those who wish to grow under fluorescent lights, the most popular size is a 48" fluorescent fixture equipped with a reflector and two 40W cool white fluorescent bulbs. This will provide adequate spectrum for an area of 24" x 48" and the outer perimeters may be used for low-light plants or for propagating. A cool-white tube and a warm-white tube will increase the spectrum and improve the growing conditions. There are also other "grow" bulbs on the market which are very efficient but rather expensive.

Plants should be placed about 8" to 12" from the light, keeping in mind that the highest intensity of light is at the center of the shelf. As you move away from the center, the intensity decreases. Plants requiring high light should be placed in the center while those with a lesser demand can be placed at the two ends.

Plants in smaller pots can be adjusted to the correct level by inverting an empty pot and using it as a pedestal for the plant, being careful not to place it too near to the lights so as to avoid scorched foliage. Lights should be operative for at least 10 to 12 hours per day and may be increased to 14 hours to induce blooming. Timers are imperative and should be installed in order to ensure that adequate periods of light and darkness are afforded.

Reflectors and lamp bulbs should be kept clean, keeping in mind that light output weakens with age of the bulb. Lower-light affect can be solved by either replacing the bulb or increasing the duration of light to 14 hours. If

Fluorescent light stands at the home of Dale Martens in Texas

you listen your plants will tell you if they are receiving the correct measure of light. For instance, if the leaves are inclined to grow towards the light, it is a sign of insufficient light. On the other hand, a plant whose leaves are pointed down and hugging the sides of the pot is receiving more than an adequate supply of light. Lack of bloom and pale or yellowing leaves may also act as an indicator of low light.

Light also has a dramatic effect on variegated plants (those whose green leaves are marked with paler areas of light green, yellow, or white). Strange as it may seem, variegated plants will do best in high light. Light is absorbed by the chlorophyll (green) in a leaf. If a plant is placed in a low light area it will immediately receive a signal to produce more chlorophyll to supplement the light intake. Hence the leaves become greener and the variegation is reduced. Heat is also a factor in increasing chlorophyll so it is advisable to keep your variegates in the coolest, high-light area of your plant room. This can be a challenge, as high light levels are usually the warmest. For that reason, many of us have great difficulty in growing and maintaining variegates. These may not be the best plants for beginners.

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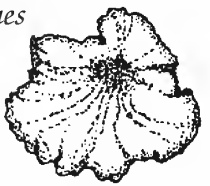

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Trouble Growing Those Streps? — Try Wicking Them

Arleen Dewell <simon_holland@bc.sympatico.ca>
#311-2366 Wall St., Vancouver BC Canada V5L 4Y1

When I first began to learn about the genus *Streptocarpus*, I was told by more experienced growers not to keep them wet all the time and to allow a drying out period between waterings. I followed this advice, but enjoyed only moderate success with my streps. They bloomed sporadically and over time developed dried, yellowed or browning leaf margins and tips. I noted that some of the leaves on my rosulate streps also appeared to have a "shirred" look. In other words, the midrib looked at though it had been shortened or gathered, giving the whole leaf a convoluted, puckered quality. After a year or so of lack-lustre results, I reluctantly abandoned my strep growing efforts.

The technique of wick watering began to interest me around this time, and I decided to learn all I could about it. Changing a watering system can mean months of experimentation before one comes up with the right soil texture and wicking material that work well with aspects in the growing environment. One day on a whim, I decided to wick a young streptocarpus plant that I had received as a table favour at one of our AGGS conventions. I fully expected the plant to die on a system that provided constant watering, having been told in the past that streps resented this treatment. I was amazed a few months later to find that not only was the strep still very much alive, but prospering and improving in appearance with each passing day! For the first time, I had perfect leaves from base to tip with no sign of yellowing, drying or puckering.

I wick to individual water reservoirs so it is easy to monitor how much water each plant uses in any given length of time. I was stunned to realize that, in my environment, an actively growing strep in a five-inch bulb or azalea pot will draw approximately two cups of water a week! The icing on the cake of course was the bloom, as all those leaves began to send up blossom stalks, one after another. The lesson here is that there are no hard and fast rules when it comes to growing gesneriads. If a plant doesn't perform the way you expect based on the facts you have learned about its care, don't be afraid to try a new approach, even if it is contrary to everything you think you know about your plants.

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New Slide Programs

1999 Convention Flower Show – Continuing our slide programs featuring the best of the entries at the Convention Flower Show, we are offering another program again this year. You are invited to tour the show to see some of the 167 entries that "Topped the Charts" in Nashville this year.

The Genus *Streptocarpus* – A new slide program has been put together to reflect some of the recent changes and additions to this fascinating genus. 1999 brought the publication of a new *Streptocarpus* Register as well as two special issues of THE GLOXINIAN which concentrated on this genus. To focus even more and to add to your visual enjoyment of this genus, this new program includes many new pictures donated by Toshijiro Okuto. (Please note that for this new program we will be accepting rental dates only after January 1.)

To request either of these new slide programs with typed commentaries, send a check for $20 payable to AGGS to Marlene Beam, 1736 S. Oakland Street, Aurora, CO 80012. Specify the date when the program will be shown and give as much lead time as possible. Your request will be acknowledged and the program will arrive at least one week in advance of your date. You must return the program via UPS insured for $100 or via First Class Priority Mail within five days after your show date.

Young plants of Dibley's hybrid streptocarpus recently brought to the U.S. by Maryjane Evans: (clockwise starting at 2:00) *S.* 'Sally', *S.* 'Lisa', *S.* 'Rosemary', *S.* 'Branwen', *S.* 'Anne'

Show Your Colors!

The 1999 AGGS tee shirt boasts red *Columnea* 'Pele' blossoms against green foliage on a background of a light yellow 100% cotton shirt. The drawing by Patrick Worley first appeared in a Mike Kartuz catalog several years ago (thanks to both of them for permission to use the image) and is an accurate representation of a beautiful gesneriad.

Order yours today by sending $12 per shirt plus $3 shipping per order. (Note that the shipping charge is per order not per shirt, so save money by ordering for your entire chapter!)

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Correction and Clarification – TG Vol. 49, No. 3

In "*Streptocarpus* Species ... after 1971": on page 18, the publication date for *Streptocarpus thysanotus* should read 1975 instead of 1985; clarification on page 19, *Streptocarpus pallidiflorus* was published by C.B. Clarke in 1906, revised in 1971 and a reversion to the 1906 name published in 1986.

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